

# Notice of Allowability

Application No.

09/760,434

Examiner

Christopher A. Revak

Applicant(s)

JOSEPH ET AL

Art Unit

2131

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication received on January 27, 2005.
2. ☒ The allowed claim(s) is/are 1-7 and 9-27.
3. ☒ The drawings filed on 21 January 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date see attached
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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## NOTICE OF ALLOWANCE

### *Examiner's Amendment*

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George Lee on April 19, 2005.

The application has been amended as follows:

1. (Currently Amended) A network system for switching security associations comprising:
  - a first network device;
  - a second network device, the second network device being an active network device; and
  - a third network device, the third network device being a standby network device;
  - a first secure communication between the first and second network devices, the first secure communication having a security association and a pre-defined sequence number limit less than a maximum sequence number; and

a second secure communication between the first and third network devices, the second secure communication having the same security association as the first secure communication without negotiating a different security association, the second secure communication also having an initial sequence number greater than the pre-defined sequence number limit.

11. (Currently Amended) A network system for switching security associations comprising:

a first network device:

a second network device, the second network device being an active network device: and

a third network device, the third network device being a standby network device;

a first secure communication between the first and second network devices, the first secure communication having a security association and a pre-defined sequence number limit less than a maximum sequence number;

a second secure communication between the first and third network devices, the second secure communication having the same security association as the first secure communication without negotiating a different security association, the second secure communication also having an initial sequence number greater than the pre-defined sequence number limit; and

a fourth network device having security information corresponding to the security association, the fourth network device capable of passing the security information from the first network device to the third network device;

wherein replay prevention is enabled for both the first and second secure communications.

### ***Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance:

It was not found to be taught in the prior art of a first secure communications between a first network device and a second active network device using a security association and a pre-defined sequence number less than a maximum sequence number. A second secure communication between the first network device and a third standby device has the same security association as the first secure communication without having to negotiate a different security association, wherein the second secure communication has an initial sequence number greater than the pre-defined sequence number limit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Berg et al, U.S. Patent 6,674,713 discloses of session failing and communications are automatically switched over from this session to another session in a telephony network.

Law et al, U.S. Patent 6,330,602 discloses of servers in a cluster wherein a server fails, it is checked to see if a server program has restarted, but discloses of the difficulty of determining the current state of the TCP session that includes the sequence number.


Nessett et al, U.S. Patent 6,055,236 discloses of RFC 2402 IP Authentication Headers and the use of sequence numbers in order to prevent replay attacks.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Revak whose telephone number is 571-272-3794. The examiner can normally be reached on Monday-Friday, 6:30am-4:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CR  
  
April 29, 2005

Christopher Revak  
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4/29/05